

Appl. No. 10/033,990
Amdt. dated June 10, 2004
Reply to Office action of April 7, 2004

REMARKS/ARGUMENTS

The Applicants acknowledge receipt of the Office Action dated April 7, 2004, in which, the Examiner: 1) restated a restriction requirement; 2) rejected claims 1-10 under 35 U.S.C. § 112, second paragraph; 3) rejected claims 1-4 and 8 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,319,829 B1, issued to Pasco et al. (hereinafter Pasco); 4) rejected claims 18-22 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,477,160, issued to Love (hereinafter Love); 5) rejected claims 5 and 6 under 35 U.S.C. § 103(a) as being unpatentable over Pasco in view of U.S. Patent 6,081,429, issued to Barrett (hereinafter Barrett) and U.S. Patent 6,020,749, issued to Morris et al. (hereinafter Morris); 6) rejected claim 9 under 35 U.S.C. § 103(a) as being unpatentable over Pasco in view of U.S. Patent 6,335,491 B1, issued to Alagaratnam et al. (hereinafter Alagaratnam); 7) rejected claim 10 under 35 U.S.C. § 103(a) as being unpatentable over Pasco; 8) rejected claims 23 and 24 under 35 U.S.C. § 103(a) as being unpatentable over Love; and 9) stated that claim 7 would be allowable if rewritten to overcome the rejections under 35 U.S.C. § 112, second paragraph.

I. RESTRICTION REQUIREMENT

In accordance with the election made on April 1, 2004, claims 11-17 have been cancelled.

II. REJECTIONS BASED ON 35 U.S.C. § 112, SECOND PARAGRAPH

Claims 1-10 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claims 1, 4, and 7-9 have been amended to overcome the rejections.

III. REJECTIONS BASED ON 35 U.S.C. § 102

Claims 1-4 and 8 were rejected under 35 U.S.C. § 102(e) as being anticipated by Pasco. In order for a reference to anticipate the scope of a claim under 35 U.S.C. § 102(b), the cited "reference must teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present." MPEP 706.02.

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Claim 1 has been amended to include the inner surface of one of the interposers being adjacent to the top surface of the substrate and the inner surface of the other interposer being adjacent to the bottom surface of the substrate. The interposers (20) of Pasco are all in between the bottom of substrate (44) and printed circuit board (50). Pasco does not disclose an interposer adjacent to the top surface of the substrate. Therefore, Pasco does not anticipate claims 1-4 and 8 and the rejection should be withdrawn.

Claims 18-22 were rejected under 35 U.S.C. § 102(b) as being anticipated by Love. Claim 18 has been amended to include a first interposer disposed adjacent to the top surface of the substrate and coupled to the test port, and a second interposer disposed adjacent to the bottom surface of the substrate and coupled to the conductive contact pads. Love does not disclose interposers adjacent to the top and bottom surfaces of the substrate. Therefore, Love does not anticipate claims 18-22 and the rejection should be withdrawn.

IV. REJECTIONS UNDER 35 U.S.C. § 103(a)

Claims 5 and 6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Pasco in view of Barrett and Morris. Claim 9 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Pasco in view Alagaratnam. Claim 10 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Pasco. Claims 5, 6, 9, and 10 each depend from claim 1. As discussed above, claim 1 has been amended to include features not found in Pasco. Therefore, the obviousness rejections based on Pasco should be withdrawn.

Claims 23 and 24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Love. Claims 23 and 24 depend from claim 18, which has been amended to include limitations not found in Love. Therefore, the obviousness rejections based on Love should be withdrawn.

V. ALLOWABLE SUBJECT MATTER

Claim 7 has been amended to overcome the rejection based on 35 U.S.C. § 112, second paragraph and to include the limitations of the original claim 1. Therefore, claim 7 is in condition for allowance.

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VI. CONCLUSIONS

Applicants respectfully request reconsideration and allowance of the pending claims. If the Examiner feels that a telephone conference would expedite the resolution of this case, he is respectfully requested to contact the undersigned.

In the course of the foregoing discussions, Applicants may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the prior art which have yet to be raised, but which may be raised in the future.

Applicants respectfully request that a timely Notice of Allowance be issued in this case. If any fees or time extensions are inadvertently omitted or if any fees have been overpaid, please appropriately charge or credit those fees to Hewlett-Packard Company Deposit Account Number 08-2025 and enter any time extension(s) necessary to prevent this case from being abandoned.

Respectfully submitted,



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